



Rabbit Anti-TRIB1 antibody

SL12343R

Product Name:	TRIB1
Chinese Name:	G蛋白偶联诱导蛋白2受体抗体
Alias:	Tribbles homolog 1; TRB-1; G-protein-coupled receptor-induced gene 2 protein; GIG-2; SKIP1; TRIB1_HUMAN; C8FW; GIG2; TRB1; Trib1; Tribbles homolog 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,Sheep,Monkey,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human TRIB1/GIG2:151-250/372
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	TRB-1 is a 372 amino acid protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase superfamily. Expressed ubiquitously with highest expression in bone marrow, thyroid gland, skeletal muscle and pancreas, TRB-1 interacts with MAPK kinases and is thought to regulate the activation of MAP kinses, possibly controlling MAP kinase cascades. The gene encoding TRB-1 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800

genes and is associated with a variety of diseases and malignancies.

Function:

Interacts with MAPK kinases and regulates activation of MAP kinases. May not display kinase activity.

Subcellular Location:

cytoplasm.

Tissue Specificity:

Expressed in most human tissues with the highest levels in skeletal muscle, thyroid gland, pancreas, peripheral blood leukocytes, and bone marrow.

Similarity:

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. Tribbles subfamily.
Contains 1 protein kinase domain.

SWISS:

Q96RU8

Gene ID:

10221

Database links:

[Entrez Gene: 10221](#) Human

[Entrez Gene: 211770](#) Mouse

[Entrez Gene: 78969](#) Rat

[Entrez Gene: 521857](#) Cow

[Omim: 609461](#) Human

[SwissProt: Q96RU8](#) Human

[SwissProt: Q8K4K4](#) Mouse

[Unigene: 444947](#) Human

[Unigene: 40298](#) Mouse

[Unigene: 204391](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Trib1在脂肪组织维持和脂质代谢紊乱上发挥关键作用;

巨噬细胞至少有两个亚类, 即M1型和M2型。M1型巨噬细胞参与促炎反应, 且在宿主防御细菌和病毒感染中发挥核心作用。M2巨噬细胞与抗炎反应、寄生虫感染、组织重构、纤维化以及Tumour疾病发展相关。

Trib1是个衔接蛋白, 与Ubiquitin连接酶COP1相互作用参与蛋白降解。人类全基因组关联研究表明TRIB1参与脂质代谢。

日前, 大阪大学WPI免疫前沿研究中心等处的研究人员, 发现Trib1对F4/80 + MR +组织内在巨噬细胞的分化至关重要, 且这些巨噬细胞和M2巨噬细胞、酸性粒细胞具有共同的特性(称之为M2类巨噬细胞)。但是, Trib1在M1髓系细胞就不会发挥这种作用。相关研究成果刊登在近期出版的《自然》(Nature)杂志上。

Trib1缺陷导致各种器官中M2类巨噬细胞急剧减少, 如骨髓、脾脏、肺以及脂肪组织。在Trib1缺失的marrow cells中, C / EBP α 的异常表达要为巨噬Cell differentiation缺陷负责。没有想到的是, 造血细胞缺乏

Trib1的小鼠, 减少了脂肪组织块, 并伴随着脂肪分解增加, 即使是在正常饮食条件下。

M2类巨噬细胞的补充可缓解这种病理学现象。这表明, 这类巨噬细胞的缺乏是引发脂肪分解的原因。为了应对高脂肪饮食, 造血细胞缺乏

Trib1的小鼠发育中会呈现高甘油三酯血症、胰岛素抗性, 同时增加促炎细胞基因诱导。

这些结果表明Trib1在脂肪组织维持和脂质代谢紊乱上发挥关键作用, 而其作用是通过控制组织内在M2类巨噬细胞的分化实现的。